



The REFINEMENT Project

Research on Financing  
Systems' Effect on the Quality  
of Mental Health Care

**REPATO**

**REfinement PAthways TOol**

**An instrument for collecting  
information on pathways of adults  
aged 18 or older with mental  
health needs (excluding dementia  
and substance disease disorders)  
through service systems in  
European countries**

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REFINEMENT Work Package 7:  
Describing and interpreting pathways of care



## PARTNERS

The REFINEMENT project is conducted by an experienced team of health economists, mental health service researchers, public health specialists and social care experts from eight European countries.



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# Introduction

**General remarks** REPATO asks, in a structured way, relevant questions for describing pathways of care of adult people with mental health needs within and between selected major general and specialist care settings for a specific country, region or otherwise defined geographical area.

After a literature review and pilot studies in eight European countries three practically relevant topics were selected:

- (1) service utilisation patterns within primary care, and also between primary care and specialist mental health care,
- (2) continuity of mental health, care and
- (3) readmission following acute psychiatric hospitalisation.

Of, course, many other pathways exist and multiple step pathways could have been included, but this would in most cases overtax the resources of mental health care planners. The selected “one step” pathways, if adequately described, can in themselves provide valuable insights into the functioning of the system of care for adult people with mental health.

In relation to the main topic of the REFINEMENT project, the information collected on pathways may have a double meaning: First, pathways of care are in themselves indicators of quality of care (e.g. continuity of care, hospital readmission rates) which are influenced by the availability of services (see REMAST), by financing mechanisms (see FINCENTO) and by other factors; second, pathways of care influence other quality of care indicators, such as patient satisfaction (REQUALIT).

In addition to describing the pathways – by empirical data or expert knowledge – factors possibly influencing specific patterns of pathways should be considered (examples for such potentially influencing factors are provided throughout REPATO). An important distinction is made throughout REPATO: whether the pathway described relates to all types of patients or only to subgroups, especially to severely mentally ill and/or people with complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder), for whom pathways are mostly different from those with less severe disorders.

Within REPATO pathways of care are conceptualised as patterns of service utilisation with at least two service contacts in an observable sequence.

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For definitions see the REAPTO glossary at the end of this document and the REFINEMENT glossary ([www.refinementproject.eu/](http://www.refinementproject.eu/))

Based on a review of the literature the REPATO tries to focus on the most frequent and therefore relevant pathway steps in mental health care. Therefore our questions are assigned to the following topics:

### 1. Pathways on the interface between primary and specialised mental health care

Special attention is paid to the distribution of cases between the local primary and secondary levels of care (e.g. referral rates by general practitioners to mental health specialists; proportions of referrals from different sources to mental health services, etc.) and on the extent, to which general practitioners treat service users with psychiatric disorders themselves or refer them to psychiatric care (or may be follow a “shared care paradigm”).

### 2. Continuity of mental health care (and its opposite, disengagement or dropout)

Information is collected on the extent, to which the discrete elements in the care pathways of individuals are linked and coordinated and the stability of service user-provider relationships over time is ensured. Additionally the REPATO focuses on interruptions and discontinuations of care pathways, demonstrated by the extent of dropout from mental health treatment.

### 3. Psychiatric hospital readmissions

Various data on readmissions after acute psychiatric hospitalisations are collected. As after hospital discharge the responsibility for prevention of readmission passes gradually from the hospital to the community provider/s, the tool differentiates between earlier and later readmissions, in order to be able to relate findings more precisely to hospital- vs. community-related variables.

For each topic you are asked for:

- Information on [selected service utilisation](#) patterns in order to create indicators (e.g. readmission rates), which allow comparisons e.g. between services, regions, periods of time, etc.
- Additional information based on [observations, views, evaluations](#), etc. in terms of the service utilisation patterns mentioned above. For answering these open questions expert interviews are the preferred sources of information.
- Possible [influencing variables](#) on the detected pathway characteristics in order to find out, which system and service related factors could predict different service utilisation patterns.

It can be assumed that a number of variables influence service utilisation patterns of several topics. Where this applies, the respective influencing factors are listed repeatedly, but are described only at a single point.

## Technical remarks

- Even though the tool primarily aims at describing the typical and most common pathways, it is also interested in projects / models of best practice or recent and planned changes in your country / region – they could make a valuable contribution to this topic.

Please note relevant information on such innovations and attach it to the REPATO.

- In preparing your responses, please focus on the geographical area that you have selected for your study. However do indicate if there are significant differences between sub-areas of this area. It would also be helpful to indicate if the study area you selected is representative for your country.
- If data are only available for specific structures, like care sectors, services, providers, etc. (instead of geographical regions), please specify the data source and indicate if, and to which extent, the sample is representative for your study area and/or your country.
- There are three approaches to provide the requested information: data analyses, review of empirical findings and expert interviews.



**Data analyses.** This is the preferred method and should be applied whenever possible, especially in cases where service utilisation patterns in the form of performance indicators are asked for.



**Collection and review of available empirical findings.** If the required original service utilisation data are not available, collect and review findings from all studies, evaluation reports, websites, etc., which may contribute to the assessment of the specific situation in your country / study area



**Interviews with relevant stakeholders and experts.** Expert interviews should be conducted primarily as a substitute for unavailable empirical data, but also to get additional information (e.g. interpretation and evaluation of already collected data).

The analysis of original data is therefore the preferred method of collecting information and should be performed wherever possible. It is recommended that you first address the questions, which can be answered by analysing available service utilisation data. In a second step you should collect and review other empirical findings. Those questions, which still remain unanswered after steps one and two, should be asked during the expert interviews. Even where only broad response categories are given, it is recommended to add detailed data whenever available.

For each question of the REPATO the possible categories of source/s of information are listed. Please indicate for each question the source/s of information which you actually used (e.g. which database, which publication, which expert, etc.).

- Whenever expert interviews are performed, the relevant questions of the REPATO should be used as an interview guide. Please compile the respective interview guide yourself by extracting the relevant questions from the REPATO (and if

necessary translating them in your language). The extent of the interview guide (number of questions) depends (1) on the number of questions which could not be answered by data analyses and reviews, and (2) on the range of knowledge the respective expert covers. It is recommended to send out the relevant questions of the interview guide to your interview partners in advance, to enable them to prepare themselves for the interview. Please take into consideration that you might need different groups of experts for each of the three topics listed below.

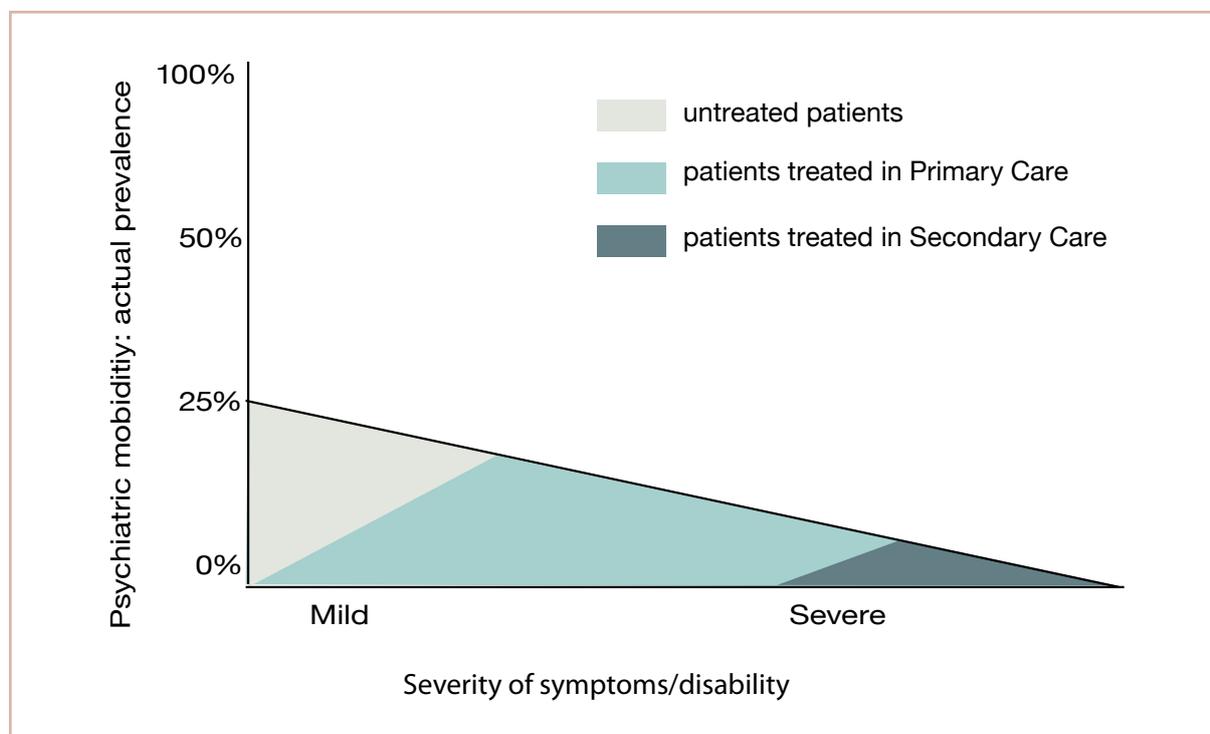
- REPATO has an automated table of content. Where it is required to fill in text or codes in space provided for this purpose in the forms the respective form might become longer than in the original version. When saving your entries please also renew the table of content, which then will automatically have the new page numbers assigned (click "update" in the reference tab in the table of contents in WORD).

# 1 Primary and Specialist Mental Health Care

**1.a Background** Thornicroft & Tansella (1999) define pathways to and through mental health services as "... the routes taken by patients in making a first contact with health services, and the subsequent sequence of contacts within an episode of care. These sequences are highly dependent upon the availability of services locally, and also upon historical patterns of referral and treatment between agencies." (p. 84). The authors see valuable potential of service users' pathway analyses in identifying structures and processes of good quality of care but also in revealing weaknesses of service systems.

In terms of limited resource availability and the overall demand of cost-effectiveness, the intensity of mental health care should be directly related to the severity of mental health problems. Thornicroft & Tansella (1999) postulate that specialist mental health services should concentrate entirely on the care for service users with the most severe symptoms and disabilities, while primary care services should provide for all other individuals with less severe conditions. Figure 1 shows the relationship between degree of disability and treatment setting for a well-targeted service.

Figure 1. Well-targeted model



Source: Thornicroft & Tansella, 1999, p. 170.

In real life, as suggested above, the great majority of service users with common mental disorders are cared for within primary care – but also many of those with severe mental disorders and/or complex needs are only seen in primary care (Goldberg et al. 2009, p. 1488). Verhaak et al. (2007) found a large variation between different European countries regarding the diagnosis and treatment of psychological symptoms in general practice, which could not be explained by the health care system characteristics they explored. Numerous other studies (e.g. Craven et al. 1995, Butler et al. 2000, Ashworth et al. 2002, Soomro et al. 2002) indicate that mental health referral rates and profiles vary greatly among individual general practitioners. Usually other factors than clinical need influence these referral decisions (Slade et al. 2008). Ross & Hardy (1999) described multiple factors, which may have an impact on mental health referral decisions in primary care. Among others, patients' representations of mental ill-health and their help-seeking behavior; the ability of GPs to detect mental disorders, their attitudes towards psychological problems, their knowledge of available mental health services as well as the accessibility of these services influence the referral behavior of GPs. Due to this complexity the authors' recommendations for promoting better referral practice in primary care address various levels.

**1.b Aims** This tool could be helpful in gaining a better knowledge of the interface between primary and secondary care and of the similarities and differences in the pathways which people usually follow. Special attention is paid on the extent, to which general practitioners treat service users with psychiatric disorders themselves or refer them to psychiatric care (or maybe follow a "shared care paradigm").

Particular emphasis is put on:

- The distribution of cases of mental disorders between the local primary and secondary levels of care (e.g. referral rates by general practitioners to mental health specialists; proportions of referrals from different sources to mental health services, etc.)
- Possible influences of regional (e.g. financing and regulatory mechanisms), organisational (service characteristics) and individual (service user and treatment characteristics) variables on the service utilisation patterns
- The relationship between the identified pathway characteristics and the quality of mental health care structures, processes and outcomes

## 1.c Service use patterns between primary and specialist mental health care

### 1.c.1 Use of specialised mental health services

It is estimated that about 27% of the adult EU population, 18–65 of age, is or has been affected by at least one mental disorder in the past 12 months. Only about one quarter of all cases had any consultation with professional health care services. In general, one third of all consultations are made in primary care only, one third with mental health specialists (psychiatrist, psychologist, counselor) and a further third with other professionals. Drug treatment is the most frequent form of treatment provided (Wittchen & Jacobi 2005).

Compared to these average EU findings, how many individuals in treatment for mental health problems use specialised outpatient mental health services in your country/region?			
<input type="checkbox"/> clearly more than one third	<input type="checkbox"/> about one third	<input type="checkbox"/> clearly less than one third	Information source/s <ul style="list-style-type: none"> <li><input type="checkbox"/> Service utilisation data</li> <li><input type="checkbox"/> Empirical findings</li> <li><input type="checkbox"/> Expert interview</li> </ul> Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

Are there differences between service users with a severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and those with a common mental illness (affective or anxiety disorder)?		
<input type="checkbox"/> yes	<input type="checkbox"/> no	If yes, please specify

### 1.c.2 Typical and most common initial outpatient contact in case of a mental health problem

Which service type is typically and most commonly utilised to make an <b>initial outpatient contact</b> with health services in case of a mental health problem in your country/region?			
<input type="checkbox"/> primary care service (GP)	<input type="checkbox"/> specialised mental health service (e.g. psychiatrist, psychologist)	<input type="checkbox"/> other service (e.g. health information centre)	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

Are there differences concerning service users with a severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and those with a common mental illness (affective or anxiety disorder)?		
<input type="checkbox"/> yes	<input type="checkbox"/> no	If yes, please specify

### 1.c.3 Typical and most common subsequent outpatient service utilisation pattern

Which is the most frequent <b>subsequent</b> (following initial outpatient contact) service utilisation pattern for outpatient mental health treatment in your country/region?			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
treatment only from primary care service/s (GP)	treatment only from specialised mental health service/s (e.g. psychiatrist, psychologist)	treatment from primary care (GP) and specialised mental health services (e.g. psychiatrist, psychologist)	other treatment
Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify	Applies to		<input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Please describe here the most frequent service utilisation pattern/s  (e.g. "Most individuals with mental health problems first consult their GP, who then makes a referral to a mental health specialist service (usually psychiatrist in private practice). There the service user is diagnosed and his/her treatment is planned, whereas treatment (in most cases drug treatment) is then continued by the GP." or "GPs treat most individuals with mental health problems themselves, referrals to mental health services occur only in cases of serious mental illness." etc.)			
Remarks and further specifications			

Are there differences concerning service users with a severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and those with a common mental illness (affective or anxiety disorder)?		
<input type="checkbox"/>  yes	<input type="checkbox"/>  no	If yes, please specify

### 1.c.4 Referrals from GPs to outpatient mental health services

Which are the three most relevant outpatient mental health service types to which individuals with mental health problems are referred by their GPs (e.g. community mental health centre, psychiatrist or psychologist in private practice, psychiatric outpatient clinic in hospital, etc.)?

1		Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview Please specify
2		
3		
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)		
Remarks and specifications		

Are there differences concerning service users with a severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and those with a common mental illness (affective or anxiety disorder)?

<input type="checkbox"/>	<input type="checkbox"/>	If yes, please specify
yes	no	

### 1.c.5 Exclusive utilisation of primary healthcare services for mental health treatment

How often are individuals with a mental disorder treated exclusively by a GP (and do not utilise any kind of specialised outpatient mental health treatment)?	
<input type="checkbox"/> very often <input type="checkbox"/> often <input type="checkbox"/> sometimes <input type="checkbox"/> seldom <input type="checkbox"/> very seldom	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)	
Remarks and specifications	

Are there differences concerning service users with a severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and those with a common mental illness (affective or anxiety disorder)?		
<input type="checkbox"/> yes	<input type="checkbox"/> no	If yes, please specify

### 1.c.6 Reasons for exclusive utilisation of primary healthcare services for mental health treatment

Which are the three main reasons for the exclusive utilisation of primary healthcare services (GP) for mental health treatment in your country/region:	
(A) On the level of the health care system (e.g. availability and accessibility of specialised psychiatric outpatient services)?	
1	
2	
3	
(B) On the level of the service providing care (e.g. GP's professional competence and/or concern to treat individuals with mental illness)?	
1	
2	
3	
(C) On the individual level (e.g. comorbid physical illness at the same time, refusal of psychiatric services, etc.)?	
1	
2	
3	
Information source/s Please specify	<input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview
	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications	

### 1.c.7 Referrals to acute psychiatric inpatient hospital care

To which extent are acute psychiatric hospitalisations initiated by the following referral sources?					
Self-referrals (including referrals by family members)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Referrals by GPs	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Referrals by psychiatrists	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Transfers from somatic hospital wards	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Other referral source (please specify)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Other referral source (please specify)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify	Applies to		<input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)		
Remarks and specifications					

Are there differences concerning service users with a severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and those with a common mental illness (affective or anxiety disorder)?

<input type="checkbox"/> yes	<input type="checkbox"/> no	If yes, please specify
---------------------------------	--------------------------------	------------------------

### 1.c.8 Aftercare following acute psychiatric hospitalisation

To which extent are acute psychiatric hospitalisations followed by at least one outpatient visit in the first month after discharge to the following services?					
GP	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Psychiatrist in practice (single-handed or group practice)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Psychologist/psychotherapist in practice (single-handed or group practice)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Psychiatric outpatient clinic of a hospital	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Community mental health centre	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Other referral source (please specify)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Other referral source (please specify)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify	Applies to		<input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)		
Remarks and specifications					

Are there differences concerning service users with a severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and those with a common mental illness (affective or anxiety disorder)?		
<input type="checkbox"/> yes	<input type="checkbox"/> no	If yes, please specify

### 1.c.9 Responsibilities in primary and specialised mental health care

Are responsibilities of primary and mental health care providers clearly defined and delimited in your region / country?			
<input type="checkbox"/> yes	<input type="checkbox"/> partially and/or with occasional implementation problems	<input type="checkbox"/> no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 1.c.10 Responsibilities in primary and specialised mental health care

Is the requirement of a well-targeted service system – where the intensity of mental health care is directly related to the severity of mental health problems – fulfilled? To which degree?			
<input type="checkbox"/> yes	<input type="checkbox"/> partially and/or with occasional implementation problems	<input type="checkbox"/> no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 1.c.11 Capacity of the specialised mental health care services

Is the capacity of the specialised mental health services large enough to care for the priority groups of individuals with mental disorders?			
<input type="checkbox"/> yes	<input type="checkbox"/> partially and/or with occasional implementation problems	<input type="checkbox"/> no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 1.c.12 Collaboration between primary care and specialised mental health services

Does collaboration between primary and specialised mental health function to ensure that the needs of the individual service user are matched to the appropriate level of care, and only graduate to a more intensive intervention if required?			
<input type="checkbox"/> yes	<input type="checkbox"/> partially and/or with occasional implementation problems	<input type="checkbox"/> no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 1.c.13 Interface between primary and specialised mental health care: Strengths and weaknesses and limitations of your health and social care system

Which are the most remarkable <b>strengths</b> of your health and social care system with regard to the interface between primary and specialised mental health care?	
1	
2	
3	
4	
5	
Which are the most remarkable <b>weaknesses or limitations</b> of your health and social care system with regard to the interface between primary and specialised mental health care?	
1	
2	
3	
4	
5	
Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications	

### 1.c.14 Models of integrated care between primary and secondary care

Which models of integrated care between primary and secondary care do exist in your country / region?	
1	
2	
3	
4	
5	
Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications, e.g.: How relevant are they, compared to the traditional models of fragmented care?	

### 1.c.15 Impact of financing and/or regulatory mechanisms on integrated care

Is integrated care supported by financing and/or regulatory mechanisms (or do these mechanisms rather promote fragmentation)?			
<input type="checkbox"/> yes	<input type="checkbox"/> partially	<input type="checkbox"/> no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

## 1.d Factors possibly influencing service use patterns between primary and specialist mental health care

In this chapter of the REPATO we ask for possible influencing variables on the detected pathways at the interface between primary and specialised mental health care, in order to find out, which system and service related factors could predict different service utilisation patterns. It can be assumed that a number of variables influence service utilisation patterns of several topics. Where this applies, the respective influencing factors are listed repeatedly, but are described only at a single point.

### 1.d.1 Gate-keeping system

Do you have a gate-keeping system, where individuals do not have direct access to secondary care and need a referral from their GP to get access to a hospital or a (mental health) specialist?			
yes partially no	Information source/s  Please specify	<input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications			

In case of gate-keeping: are there differences between mental health services and other specialised health services?		
<input type="checkbox"/> yes	<input type="checkbox"/> no	If yes, please specify

### 1.d.2 Authorisation of and reimbursement restrictions for GPs to carry out psychopharmacological therapy

Are GPs authorised to carry out (reimbursed) psychopharmacological therapy?			
yes partially no	Information source/s  Please specify	<input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications			

### 1.d.3 Authorisation of and reimbursement restrictions for GPs to carry out psychotherapy and/or psychological therapy

Are GPs authorised to carry out (reimbursed) psychotherapy and/or psychological therapy?			
yes partially no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview Please specify	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)	
Remarks and specifications			

### 1.d.4 Significance of psychiatric topics in the postgraduate training of GPs

Evidence shows that GPs who underwent mental health training are better able to detect mental illnesses and thus more often refer patients to mental health services (e.g. Barton et al. 2008, Crawford et al. 2004, Freeman et al. 2002, White et al. 2000). On the other hand inadequate training in diagnosis and management of mental disorders is related to poor detection and referral rates (Ross & Hardy 1999). Additionally, little knowledge of available treatment resources for patients with psychosocial problems predicts lower referral rates to mental health services (Craven et al. 1995).

Are there obligatory training rotations in psychiatry and/or training hours devoted to psychiatry (diagnosis and treatment of mental disorders) and mental health related subjects in the training curricula of GPs?			
<input type="checkbox"/> yes	<input type="checkbox"/> no	What proportion of (obligatory or optional) training hours are devoted to psychiatry?  ..... out of ..... months	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 1.d.5 Primary care practice types

The size of primary care practices seems to have an impact on the referral behavior of GPs: larger practices (with more partners) and health centres refer more of their patients to specialised mental health services than small practices (Hull et al. 2002, Hugo et al. 2000, Verhaak 1993). Better working relationships with community mental health teams were also reported for larger practices with at least 4 partners (Hull et al. 2002).

To which extent do the following primary care practice types exist in your country/ region? ?					
Single-handed practice	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Small group practice (2–3 partners)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Large group practice (more than 3 partners)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Health centre	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Other referral source (please specify)	<input type="checkbox"/> very often	<input type="checkbox"/> often	<input type="checkbox"/> some-times	<input type="checkbox"/> seldom	<input type="checkbox"/> very seldom
Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify	Applies to		<input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)		
Remarks and specifications					

### 1.d.6 Primary care practices with on-site mental-health workers

While in some studies the collaboration between GPs and mental health specialists in primary care led to a reduction of referrals to specialist mental health services (Felker et al. 2004, Ashworth et al. 2002), the majority of publications revealed a relationship between the presence of mental health workers in primary care practices and the rate of referrals to different mental health services (Yeung et al. 2004, Simpson et al. 2003, Swindle et al. 2003, Hull et al. 2002, Ross & Hardy 1999, Cape & Parham 1998). In a collaborative care project in the Netherlands (van Orden et al. 2009) a mental health care professional worked on site at the primary care practice and was available to provide patients a maximum of five appointments if they were referred by the GP. This approach resulted in significantly shorter referral delays and reduced mental health treatment duration and costs.

To which extent do primary care practices with on-site mental-health workers (psychologists, counselors, psychotherapists, mental health nurses, etc.) exist in your country/region?			
<input type="checkbox"/> very frequent <input type="checkbox"/> frequent <input type="checkbox"/> sometimes <input type="checkbox"/> seldom <input type="checkbox"/> very seldom	Information source/s  Please specify	<input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications			

### 1.d.7 Existence of guidelines for referral and treatment of individuals with mental disorders

Do relevant guidelines for referral and treatment of individuals with mental disorders (which include the division and/or sharing of tasks between primary and specialist mental health services) exist?			
<input type="checkbox"/> at least for the most common mental disorders	<input type="checkbox"/> for some mental disorders/problems	<input type="checkbox"/> no such guidelines	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 1.d.8 Application of guidelines for referral and treatment of mental disorders

In case such guidelines exist: Is the application of guidelines mandatory and/or does (non-) compliance with the guidelines imply consequences for service providers?			
yes partly no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview Please specify	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)	
Remarks and specifications			

### 1.d.9 Relationship styles between primary and specialised mental health care services

Close and regular links and good working relationships between primary care and specialist mental health services are associated with higher referral rates from GPs to mental health services (Hull et al. 2002, Murphy et al. 2002, Verhaak 1993).

Do relevant guidelines for referral and treatment of individuals with mental disorders (which include the division and/or sharing of tasks between primary and specialist mental health services) exist?			
<input type="checkbox"/> no regular contact (information exchange only by letter and occasionally by telephone)	<input type="checkbox"/> some contact (regular telephone contact and face-to-face contact if required)	<input type="checkbox"/> regular contact (consultant-liaison relationship with regular face-to-face contact)	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 1.d.10 Payment mechanisms for primary care physicians

Which models of integrated care between primary and secondary care do exist in your country / region?	
Please describe	
Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications	

### 1.d.11 Additional reimbursements for the application of mental health treatment by GPs

Do GPs receive additional reimbursements for the application of mental health treatment methods (e.g. psychotherapy, psychopharmacological therapy, etc.) under official payment mechanisms?			
<input type="checkbox"/> yes	<input type="checkbox"/> not for all methods	<input type="checkbox"/> no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 1.d.12 Additional variables possibly influencing service utilisation patterns between primary and specialist mental health care

<ul style="list-style-type: none"> <li>• Travel times to specialised outpatient mental health services (see 2.d.1)</li> <li>• Waiting times for regular outpatient appointments with publicly funded mental health service providers (see 2.d.2)</li> <li>• Other additional variables</li> </ul>
Please list and describe here any additional influencing variables on service utilisation patterns between primary and specialist mental health care which you detected

# 2 Continuity of Mental Health Care

## 2.a Background

Although continuity of care is commonly regarded as a central characteristic of high quality care in longer term mental disorders, there is still no common understanding of the concept of continuity of care. In fact, a wide range of definitions which emphasise differing features exists (e.g. Burns et al. 2009, Adair et al. 2003, Haggerty et al. 2003).

A recent study of the ECHO group confirmed the findings of Freeman et al. (2001, 2002) who postulated that the concept of continuity of care is multi-axial and consists at least of the following independent factors:

- Experienced continuity (experience of a coordinated and smooth progression of care from the user's point of view)
- Longitudinal continuity (care from as few professionals as possible, consistent with other needs)
- Flexible continuity (flexible care, adjusted to the needs of the individual over time)
- Cross-boundary continuity (well-managed transitions and effective communication between professionals)
- Information continuity (excellent information transfer following the service user)
- Relational continuity (provision of one or more named individual professionals with whom the user can establish and maintain a therapeutic relationship)
- Long-term continuity (uninterrupted care for as long as the service user requires it)
- Contextual continuity (care that should sustain a person's preferred social and personal relationship in the community and enhance quality of life) (Burns et al. 2009, p.315)

Therefore different components of continuity of care must be considered to evaluate its determinants and outcomes. For continuity to exist, care must be experienced as connected and coherent – this experience may differ for service users and providers (Haggerty et al. 2003).

In a certain sense, disengagement or dropout from care represents the opposite of continuity of care. Various manifestations of disengagement / dropout from mental health treatment have been described (Kreyenbuhl et al. 2009) – in most cases treatment terminations in agreement with the clinician were not even discriminated from those against medical advice (O'Brien et al. 2009).

The most frequent conceptions of treatment disengagement include failure to attend a first outpatient appointment after hospital discharge (Compton et al. 2006), gaps in service contacts of at least 12 months (Fischer et al. 2008), treatment termination without agreement of the provider (Munk-Jørgensen & Andersen 2009, Olsson et al. 2009), and stop of contacting a health professional without reporting “felt better” or “completed the recommended treatment” (Wang 2007). O’Brien et al. (2009) suggest a definition of engagement that goes beyond physical presence or attendance at services and encompasses “... factors that include acceptance of a need for help, the formation of a therapeutic alliance with professionals, satisfaction with the help already received and a mutual acceptance and working towards shared goals.” (p. 559)

Due to the variety of conceptions – besides methodological differences – rates and correlates of dropout vary extensively across studies – Morlino et al. (2009) found dropout rates ranging from 17% to 46%, Rossi et al. (2005) report on a range from 9% to 63% of service users, who only have one contact with a psychiatric outpatient service. A high dropout rate is considered to be an indicator of low quality of care, showing a poor fit between care supply and care demand (Morlino et al. 2009). Compared to individuals who still receive mental health care, those who have disengaged from treatment are considered to have more unmet needs, to be more socially impaired, to be more unwell, to have a worse outcome and to have a greater likelihood of hospitalisation (O’Brien et al. 2009). The research also suggests that service users often perceive treatment to be unhelpful and therefore disengage from treatment (Kreyenbuhl et al. 2009).

**2.b Aims** The REPATO questionnaire focuses on collecting information on the continuity of follow-up care after psychiatric hospitalisation and on the continuity/discontinuity of outpatient mental health care.

Particular emphasis was placed on:

- The extent to which the discrete elements in the care pathways of individuals are linked and coordinated and mental health care fulfils the quality criterion of continuity as well as the extent of common pathway discontinuations and interruptions – as indicated by treatment dropouts
- Influences of regional (e.g. financing and regulatory mechanisms), organisational (service characteristics) and individual (service user and treatment characteristics) variables on continuity of mental health care
- The relationship between the identified pathway characteristics and the quality of mental health care structures, processes and outcomes

## 2.c Service use patterns referring to the continuity of care

In this section calculations of performance indicators from available health care data – *only data of discharges from acute psychiatry* (definition: see glossary at the end of REPATO) – are requested.

Please calculate each indicator using the indicated formula.

### 2.c.1 Outpatient follow-up care after discharge from acute psychiatric hospitalisation

Indicators of interest: Proportions of acute psychiatric hospitalisations which are followed by an outpatient mental health service contact within 7, 30, respectively 180 days after discharge.

Period of data analysis: one index year (plus up to 180 days for outpatient contacts)

Number of acute psychiatric hospitalisations followed by a mental health outpatient service contact within: 7 days after discharge (A7) / N of acute psychiatric hospitalisations (B) × 100 30 days after discharge (A30) / N of acute psychiatric hospitalisations (B) × 100 180 days after discharge (A180) / N of acute psychiatric hospitalisations (B) × 100						
A7	A30	A180	B	$A7/B \times 100$	$A30/B \times 100$	$A180/B \times 100$
_____	_____	_____	_____	_____ %	_____ %	_____ %
fill in number	fill in number	fill in number	fill in number	fill in ratio	fill in ratio	fill in ratio
Remarks:						
Period of data collection	_____	Remarks:				
	fill in period					
Study area	whole country your study area sub-area or specific structure			Please describe and specify		
Data source	administrative data (e.g. from insurance company) survey data other data source			Please describe and specify		
Study population	<input type="checkbox"/> all <input type="checkbox"/> sample of acute psychiatric hospitalisations In case of samples: Which proportion is represented? _____ % (hospitalisations in sample / all hospitalisations × 100)			Please describe and specify (if possible, add also psychiatric inpatient and outpatient service utilisation data):		
	<input type="checkbox"/> all <input type="checkbox"/> sample of outpatient mental health service contacts In case of samples: Which proportion is represented? _____ % (contacts in sample / all contacts × 100)					

## 2.c.2 Outpatient follow-up care after discharge from acute psychiatric hospitalisation for individuals with severe mental illness and/or complex needs (SMI)

Indicators of interest: Proportions of acute psychiatric hospitalisations with severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) (SMI) which are followed by an outpatient mental health service contact within 7, 30, respectively 180 days after discharge from an acute psychiatric hospitalisation,

Period of data analysis: one index year (plus up to 180 days for outpatient contacts)

Number of discharges from acute psychiatric hospitalisations with SMI (schizophrenia or bipolar disorder) followed by a mental health outpatient service contact within: 7 days after discharge (A7) / N of acute psychiatric hospitalisations (B) × 100 30 days after discharge (A30) / N of acute psychiatric hospitalisations (B) × 100 180 days after discharge (A180) / N of acute psychiatric hospitalisations (B) × 100						
A7	A30	A180	B	A7/B × 100	A30/B × 100	A180/B × 100
_____	_____	_____	_____	_____ %	_____ %	_____ %
fill in number	fill in number	fill in number	fill in number	fill in ratio	fill in ratio	fill in ratio
Remarks:						
<b>Period of data collection</b>	_____	Remarks:				
	fill in period					
<b>Study area</b>	whole country your study area sub-area or specific structure	Please describe and specify				
<b>Data source</b>	administrative data (e.g. from insurance company) survey data other data source	Please describe and specify				
<b>Study population</b>	<input type="checkbox"/> all <input type="checkbox"/> sample of acute psychiatric hospitalisations with SMI In case of samples: Which proportion is represented? _____ % (hospitalisations in sample / all hospitalisations × 100)		Please describe and specify (if possible, add also psychiatric inpatient and outpatient service utilisation data):			
	<input type="checkbox"/> all <input type="checkbox"/> sample of outpatient mental health service contacts with SMI In case of samples: Which proportion is represented? _____ % (contacts with SMI in sample / all contacts with SMI × 100)					

### 2.c.3 Days to first outpatient aftercare visit after discharge from acute psychiatric hospitalisation: All service users and those with severe mental illness and/or complex needs (SMI)

Indicators of interest: Average number of days between discharge from an acute psychiatric hospitalisation and first outpatient mental health visit in the subsequent 180 days.

Period of data analysis: one index year (plus up to 180 days for outpatient contacts)

<p><b>Total Number of days between discharge from acute psychiatric hospitalisation and first outpatient mental health visit in the subsequent 180 days (count 180 days for each acute psychiatric hospitalisation with no outpatient mental health visit in the subsequent 180 days) (A) / Number of acute psychiatric hospitalisations (B)</b></p>			
<p><b>Total Number of days between discharge from acute psychiatric hospitalisation with SMI (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and first outpatient mental health visit in the subsequent 180 days (count 180 days for each acute psychiatric hospitalisation with SMI and with no outpatient mental health visit in the subsequent 180 days) (A-SMI) / Number of acute psychiatric hospitalisations with SMI (B-SMI)</b></p>			
A	B	A/B	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
A-SMI	B-SMI	S-SMI / B-SMI	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
<b>Period of data collection</b>	_____	Remarks:	
	fill in period		
<b>Study area</b>	whole country your study area sub-area or specific structure		Please describe and specify
<b>Data source</b>	administrative data (e.g. from insurance company) survey data other data source		Please describe and specify
<b>Study population</b>	<input type="checkbox"/> all <input type="checkbox"/> sample of acute psychiatric hospitalisations In case of samples: Which proportion is represented?  _____ % (hospitalisations in sample / all hospitalisations × 100)  <input type="checkbox"/> all <input type="checkbox"/> sample of outpatient mental health service contacts In case of samples: Which proportion is represented?  _____ % (contacts in sample / all contacts × 100)		Please describe and specify (if possible, add also psychiatric inpatient and outpatient service utilisation data):

## 2.c.4 Average number of outpatient follow-up visits after acute psychiatric hospitalisation

Indicators of interest: Average number of mental health outpatient service contacts within 30 and 180 days after discharge from an acute psychiatric hospitalisation.

Period of data analysis: one index year (plus up to 180 days for outpatient contacts)

<p>Number of mental health outpatient service contacts within 30 days after discharge from an acute psychiatric hospitalisation (V30) / Number of acute psychiatric hospitalisations followed by a mental health outpatient service contact within 30 days after discharge (A30)</p> <p>Number of mental health outpatient service contacts within 180 days after discharge from an acute psychiatric hospitalisation (V180) / Number of acute psychiatric hospitalisations followed by a mental health outpatient service contact within 180 days after discharge (A180)</p>			
V30	A30	V30/A30	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
V180	A180	V180/A180	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
Period of data collection	_____	Remarks:	
	fill in period		
Study area	<p>whole country</p> <p>your study area</p> <p>sub-area or specific structure</p>	Please describe and specify	
Data source	<p>administrative data (e.g. from insurance company)</p> <p>survey data</p> <p>other data source</p>	Please describe and specify	
Study population	<p><input type="checkbox"/> all</p> <p><input type="checkbox"/> sample of acute psychiatric hospitalisations</p> <p>In case of samples:</p> <p>Which proportion is represented?</p> <p>_____ %</p> <p>(hospitalisations in sample / all hospitalisations × 100)</p> <p><input type="checkbox"/> all</p> <p><input type="checkbox"/> sample of outpatient mental health service contacts</p> <p>In case of samples:</p> <p>Which proportion is represented?</p> <p>_____ %</p> <p>(contacts in sample / all contacts × 100)</p>	Please describe and specify (if possible, add also psychiatric inpatient and outpatient service utilisation data):	

## 2.c.5 Average number of outpatient follow-up visits after acute psychiatric hospitalisation for individuals with severe mental illness and or complex needs (SMI)

Indicators of interest: Average number of mental health outpatient visits of individuals with severe mental illness and or complex needs (SMI) (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) within 30, respectively 180 days, after discharge from an acute psychiatric hospitalisation.

Period of data analysis: one index year (plus up to 180 days for outpatient contacts)

<p>Number of mental health outpatient service contacts within 30 days after discharge from an acute psychiatric hospitalisation with SMI (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) (V30) / Number of acute psychiatric hospitalisations with SMI followed by a mental health outpatient service contact within 30 days after discharge (A30)</p> <p>Number of mental health outpatient service contacts within 180 days after discharge from an acute psychiatric hospitalisation with SMI (V180) / Number of acute psychiatric hospitalisations with SMI followed by a mental health outpatient service contact within 180 days after discharge (A180)</p>			
V30	A30	V30/A30	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
V180	A180	V180/A180	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
Period of data collection	_____	Remarks:	
	fill in period		
Study area	whole country your study area sub-area or specific structure	Please describe and specify	
Data source	administrative data (e.g. from insurance company) survey data other data source	Please describe and specify	
Study population	<input type="checkbox"/> all <input type="checkbox"/> sample of acute psychiatric hospitalisations with SMI In case of samples: Which proportion is represented?  _____ % (hospitalisations in sample / all hospitalisations x 100)  <input type="checkbox"/> all <input type="checkbox"/> sample of outpatient mental health service contacts with SMI In case of samples: Which proportion is represented?  _____ % (contacts in sample / all contacts x 100)	Please describe and specify (if possible, add also psychiatric inpatient and outpatient service utilisation data):	

## 2.c.6 Dropout from outpatient mental health care

Indicators of interest: Proportions of psychiatric outpatient service users, who had no psychiatric outpatient service contact for at least six consecutive months.

Period of data analysis: one year (plus 6 consecutive months)

<p>Number of psychiatric outpatient service users who had no psychiatric outpatient contact for <math>\geq 6</math> consecutive months (A) / Number of psychiatric outpatient service users (B) <math>\times 100</math></p> <p>Number of new psychiatric outpatient service users (with first-ever contact or first contact since <math>\geq 365</math> days) who dropped out after the first contact (had no further contact for <math>\geq 6</math> consecutive months) (A-NEW) / Number of new psychiatric outpatient service users (with first-ever contact or first contact since <math>\geq 365</math> days) (B-NEW) <math>\times 100</math></p>			
<p>A</p> <p>_____</p> <p>fill in number</p>	<p>B</p> <p>_____</p> <p>fill in number</p>	<p><math>A / B \times 100</math></p> <p>_____ %</p> <p>fill in ratio</p>	<p>Remarks:</p>
<p>A-NEW</p> <p>_____</p> <p>fill in number</p>	<p>B-NEW</p> <p>_____</p> <p>fill in number</p>	<p><math>A-NEW / B-NEW \times 100</math></p> <p>_____ %</p> <p>fill in ratio</p>	<p>Remarks:</p>
<p>Period of data collection</p>	<p>_____</p> <p>fill in period</p>	<p>Remarks:</p>	
<p>Study area</p>	<p>whole country</p> <p>your study area</p> <p>sub-area or specific structure</p>	<p>Please describe and specify</p>	
<p>Data source</p>	<p>administrative data (e.g. from insurance company)</p> <p>survey data</p> <p>other data source</p>	<p>Please describe and specify</p>	
<p>Study population</p>	<p><input type="checkbox"/> all</p> <p><input type="checkbox"/> sample of outpatient mental health service contacts</p> <p>In case of samples: Which proportion is represented?</p> <p>_____ %</p> <p>(contacts in sample / all contacts <math>\times 100</math>)</p>	<p>Please describe and specify</p>	

## 2.c.7 Dropout of individuals with severe mental illness and/or complex needs (SMI) from outpatient mental health care

Indicators of interest: Proportions of psychiatric outpatient service users with severe mental illness and or complex needs (SMI) (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder), who had no outpatient service contact for at least six consecutive months.

Period of data analysis: one year (plus 6 consecutive months)

<p><b>Number of psychiatric outpatient service users with SMI (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) who had no psychiatric outpatient service contact for <math>\geq 6</math> consecutive months (A) / Number of psychiatric outpatient service users with SMI (B) <math>\times 100</math></b></p> <p><b>Number of new psychiatric outpatient service users (with first-ever contact or first contact since <math>\geq 365</math> days) with SMI who dropped out after the first contact (had no further contact for <math>\geq 6</math> consecutive months) (A-NEW / Number of new psychiatric outpatient service users with SMI (first-ever contact or first contact since <math>\geq 365</math> days) (B-NEW) ) <math>\times 100</math></b></p>			
A	B	$A / B \times 100$	Remarks:
_____ % fill in number	_____ % fill in number	_____ % fill in ratio	
A-NEW	B-NEW	$A-NEW / B-NEW \times 100$	Remarks:
_____ % fill in number	_____ % fill in number	_____ % fill in ratio	
<b>Period of data collection</b>	_____ % fill in period	Remarks:	
<b>Study area</b>	<input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure	Please describe and specify	
<b>Data source</b>	<input type="checkbox"/> administrative data (e.g. from insurance company) <input type="checkbox"/> survey data <input type="checkbox"/> other data source	Please describe and specify	
<b>Study population</b>	<input type="checkbox"/> all <input type="checkbox"/> outpatient mental health service contacts with SMI In case of samples: Which proportion is represented?  _____ % (contacts in sample with SMI / all contacts $\times 100$ )	Please describe and specify	

## 2.d Factors possibly influencing continuity of mental health care

This section of the REPATO focuses on possible influencing variables on the continuity of mental health care, in order to find out, which system and service related factors could predict different service utilisation patterns. It can be assumed that a number of variables influence service utilisation patterns of several topics. Where this applies, the respective influencing factors are listed repeatedly, but are described only at a single point.

### 2.d.1 Travel times to specialised outpatient mental health care services

Aftercare following hospitalisation seems to be more probable if the outpatient services are located geographically close to the patients (Saarento et al. 2000), whereas an increased distance from mental health service providers is associated with a greater risk of 12-month gaps in mental health services utilisation (McCarthy et al. 2007). Individual transportation problems are found to indicate a lower rate of follow-up treatment after hospital discharge (Weber 2004).

How high do you rate the percentage of individuals who are faced with the following travel times, if they want to utilise outpatient mental health services?			
<10 minutes  _____ % of the population	10–15 minutes  _____ % of the population	>20 minutes  _____ % of the population	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 2.d.2 Waiting times for regular outpatient appointments with mental health providers

The likelihood of an individual's engagement in outpatient aftercare following psychiatric hospitalisation increases, if the waiting time for the first follow-up appointment is minimised (Kreyenbuhl et al. 2009, Compton et al. 2006, Williams et al. 2008). The lack of a 24-hour follow-up after discharge of is associated with a higher proportion of service users who were lost to follow-up (Yeaman et al. 2003).

Do you have information on and/or an assessment of the average waiting time for regular outpatient appointments with publicly funded mental health providers?	
Average number of days between appointment and consultation	Please fill in
Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications	

### 2.d.3 Balance between pharmacological and psychological / psychotherapeutical treatment

Mclvor et al. (2004) examined non-attendance rates within a community mental health clinic and suggested that the provision of non-medical interventions might have a positive impact on attendance rates.

Which is the predominant therapeutic approach of outpatient mental health services in your country/region?			
<input type="checkbox"/> exclusively or primarily pharmacological therapy  (psychotherapy only occasional for single service users, if at all)	<input type="checkbox"/> exclusively or primarily psychological therapy/psychotherapy  (pharmacological treatment only occasional for single service users, if at all)	<input type="checkbox"/> pharmacological and psychological therapy/psychotherapy  (whenever needed, service users are treated with both methods, preferably in an integrated way)	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 2.d.4 Existence of community mental health services

There is large evidence that the availability of community based mental health services (like ACT, early intervention teams, community mental health teams, home treatment, etc.) increases the continuity of mental health care (Pijl & Sytema 2004, Bindman et al. 2000) and reduces the risk of treatment drop-out (O'Brien et al. 2009, Berghofer et al. 2002, Freeman et al. 2002).

To which extent do multidisciplinary community mental health services, which offer intensive and home-based support to improve functioning and well-being in major areas of life, such as work, social relationships, residential independence, money management, physical health and wellness, etc. (e.g. Assertive Outreach Teams) exist in your country/region?			
<input type="checkbox"/> very frequent  <input type="checkbox"/> frequent  <input type="checkbox"/> sometimes  <input type="checkbox"/> seldom  <input type="checkbox"/> very seldom	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)	
Remarks and specifications			

## 2.d.5 Application of strategies for engaging and retaining service users in care

Mental health services which apply engagement strategies, e.g. by offering prompt and convenient appointments, using reminders and augmenting with telephone contact, are more likely to have lower dropout rates (Mitchell & Selmes 2007; McIvor et al. 2004).

To which extent do multidisciplinary community mental health services, which offer intensive and home-based support to improve functioning and well-being in major areas of life, such as work, social relationships, residential independence, money management, physical health and wellness, etc. (e.g. Assertive Outreach Teams) exist in your country/region?			
<input type="checkbox"/> services with no regular application of service user engagement strategies  (only occasional interventions with several patients)	<input type="checkbox"/> services with some application of service user engagement strategies  (e.g. regular use of homogenous prompts and appointment reminders, telephone follow-up and/or treatment contracts if required)	<input type="checkbox"/> services with regular application of service user engagement strategies  (e.g. prompts and appointment reminders by using the most promising method (telephone call, letter, SMS, etc.) for each patient, follow-up and offer of new appointments to patients who do not show up, active patient and carer participation, shared decision making, treatment contracts)	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

## 2.d.6 Outpatient mental health treatment on weekdays outside core time

How high do you rate the percentage of individuals who are faced with the following travel times, if they want to utilise outpatient mental health services?			
<input type="checkbox"/> <10% of services	<input type="checkbox"/> 10–20% of services	<input type="checkbox"/> >20% of services	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

## 2.d.7 Availability of 24-hour ambulatory emergency mental health treatment: services per 1,000,000 population

Saarento et al. (1998) analysed factors which are related to discontinuity of care. The authors found a relationship between the lack of 24-hour emergency services and the utilisation of only inpatient care during a one-year period.

How high do you rate the percentage of individuals who are faced with the following travel times, if they want to utilise outpatient mental health services?				
<10 minutes  _____ % of the population	10–15 minutes  _____ % of the population	>20 minutes  _____ % of the population	Information source/s  Please specify	<input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)				
Remarks and specifications				

## 2.d.8 Travel times to/of 24-hour ambulatory emergency mental health treatment services

How high do you rate the percentage of individuals who are faced with the following travel times (= waiting times in case of mobile services), if they want to utilise 24-hours ambulatory emergency mental health treatment services??				
<10 minutes  _____ % of the population	10–20 minutes  _____ % of the population	20–30 minutes  _____ % of the population	>30 minutes  _____ % of the population	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)				
Remarks and specifications				

### 2.d.9 Acute psychiatric hospitalisations with referral to services outside the local

Hospital discharges to mental health services outside the local area are associated with a lower likelihood of outpatient follow-up care (Crawford et al. 2004, Freeman et al. 2002), whereas continuity of care is promoted by a sectorised mental health service system (Freeman et al. 2002).

How often are service users referred to mental health services outside their local area after an acute psychiatric hospitalisation?			
<input type="checkbox"/> very often <input type="checkbox"/> often <input type="checkbox"/> sometimes <input type="checkbox"/> seldom <input type="checkbox"/> very seldom	Information source/s  Please specify	<input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications			

### 2.d.10 Acute psychiatric hospitalisations with discharge against medical advice

If a psychiatric hospitalisation is terminated by a discharge against medical advice, a lower likelihood of timely outpatient follow-up care can be expected (Stein et al. 2007, Compton et al. 2006).

How often are acute psychiatric hospitalisations terminated by a discharge against medical advice?			
<input type="checkbox"/> very often <input type="checkbox"/> often <input type="checkbox"/> sometimes <input type="checkbox"/> seldom <input type="checkbox"/> very seldom	Information source/s  Please specify	<input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview	Applies to <input type="checkbox"/> Whole country <input type="checkbox"/> Your study area <input type="checkbox"/> Sub-area or specific structure (please specify)
Remarks and specifications			

### 2.d.11 Discharge planning interventions

Loss to follow-up occurs most likely in the period immediately after discharge, thus indicating the need for discharge planning interventions in the early phase of admission (Freeman et al. 2002). A large number of studies have shown that different discharge planning interventions are effective in improving adherence to outpatient aftercare among individuals with mental disorders and therefore contribute to his/her continuity of mental health care (Dixon et al. 2009, Kreyenbuhl et al. 2009, Crawford et al. 2004, Steffen et al. 2009, Sytema & Burgess 1999).

Which of the following types of acute psychiatric inpatient facilities is predominant, with regard to the performance of discharge planning interventions to improve service users' engagement in outpatient aftercare following hospital discharge?			
<input type="checkbox"/> facilities with no regular discharge planning  (occasional interventions with several patients)	<input type="checkbox"/> facilities with some discharge planning interventions  (e.g. arranging appointments with aftercare agencies and/or using reminders; face-to-face contacts with out-patient agencies if required)	<input type="checkbox"/> facilities with regular discharge planning  (e.g. regular discussions about discharge plans with aftercare agencies, carrying out outpatient visits before discharge, skills training)	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 2.d.12 Inter-agency collaboration and communication

There is large evidence that a lacking respectively problematic inter-agency communication and collaboration is associated with a reduced continuity in service users' mental health care, whereas joint working and integrated and collaborative care provide a more continuous and better-quality care (Houle et al. 2010, Freeman et al. 2002).

Which is the predominant relationship style between the most relevant specialised mental health services (inpatient/residential, day care and outpatient)?			
<input type="checkbox"/> no regular contact  (information exchange only by letter and occasionally by telephone)	<input type="checkbox"/> some contact  (regular telephone contact and face-to-face contact if required)	<input type="checkbox"/> regular contact  (consultant-liaison relationship with regular face-to-face contact)	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 2.d.13 Limited specialised outpatient mental health care coverage

Are there any limitations concerning the number of mental health outpatient contacts in a certain time period paid by the third party (insurance or tax fund)?			
<input type="checkbox"/> yes	<input type="checkbox"/> partly	<input type="checkbox"/> no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 2.d.14 Preauthorisation or referral requirements for specialised outpatient mental health care

US studies showed that individuals who are enrolled with health care insurance carriers who require preauthorisation for outpatient mental health visits have a reduced likelihood of utilising outpatient follow-up care after discharge from psychiatric hospitalisation (Olfson et al. 2010, Weber 2004).

Do requirements of official preauthorisation or referral for outpatient mental health visits exist in your country/region?			
<input type="checkbox"/> yes	<input type="checkbox"/> partly	<input type="checkbox"/> no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

## 2.d.15 Out of pocket payment requirements for specialised outpatient mental health care

Costs of outpatient mental health services can be regarded as a barrier to follow-up care after discharge from psychiatric hospitalisation (Li et al. 2005, Freeman et al. 2002). Among US Medicare insurants an inverse relationship between the absolute level of mental health cost sharing and rates of follow-up after hospital discharge was found (Trivedi et al. 2008).

Do out of pocket payment requirements for specialised outpatient mental health care exist in your country/region?			
<input type="checkbox"/> yes	<input type="checkbox"/> partly	<input type="checkbox"/> no	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

## 2.d.16 Equivalency of out of pocket payments in primary, specialised physical, and specialised mental health care

US insurants of Medicare health plans with greater cost sharing for mental health than for other health services have been shown to have a lower likelihood of receiving timely follow-up care after hospital discharge than individuals in plans where mental health co-payments were not higher than co-payments for either primary care or non-psychiatric specialist care (Trivedi et al. 2008).

Are there equivalent out of pocket payment requirements for outpatient treatment in primary, in specialised physical and in specialised mental health care services?			
<input type="checkbox"/> yes  (parity between service types)	<input type="checkbox"/> no  (differences between service types)	<input type="checkbox"/> no out of pocket payments	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

## 2.d.17 Additional variables possibly influencing the continuity of mental health care

- Length of previous hospital admission (“Average length of stay” see 3.d.4)
- Involuntary psychiatric hospital admission (see 3.d.1)
- Other additional variables

Please list and describe here any additional influencing variables on the continuity of mental health care (or its opposite, disengagement or dropout) which you detected.

# 3 Readmission Following Psychiatric Hospitalisation

**3.a Background** Readmission has often been used as an outcome measure for the effectiveness of community care as well as for the quality of the previous hospitalisation. The calculation of readmission rates is feasible in many places and the indicator is regarded as suitable to examine whether the objective of minimising hospital admissions has been achieved. Therefore readmission rates are frequently used to indicate the effectiveness and efficiency of mental health service delivery.

As readmission risk is greatest in the period immediately after discharge, Durbin et al. (2007) addressed the question of whether readmission is an appropriate indicator for measuring hospital performance and reviewed the impact of current pressure to shorten length of hospital stay on the risk of premature discharges and readmissions. They assume that "... the influence of an index hospitalisation on readmission diminishes as the period of follow-up increases and other factors come into play, such as cyclical course of mental illness, environmental stressors and access to formal and informal supports." (p. 138)

As different studies came to different results, no clear association between length of hospital stay and readmission rate has yet been found. On the other hand individuals with multiple previous admissions are at elevated risk for an early readmission (Durbin et al. 2007), which shows the need for increased efforts to interrupt this repetitive cycle. Despite the belief that the risk of readmission is relatively independent of service system variables and more strongly related to patient-bound clinical variables (Sytema & Burgess 1999), there is at least modest evidence that discharge planning measures to prepare service users for discharge can protect against early readmission (Durbin et al. 2007).

**3.b Aims** The REPATO focuses on the collection of data on patterns of readmission after acute psychiatric hospitalisation and may be used to detect similarities and differences between different service providers, different geographical regions and/or variations over time. As after hospital discharge the responsibility for the prevention of readmissions passes gradually from the hospital to the community provider/s, the tool differentiates between earlier and later readmissions and relates the different findings more precisely to hospital- vs. community-related variables.

Particular emphasis is placed on

- The extent of psychiatric hospital readmissions

- Influences of regional (e.g. financing and regulatory mechanisms), organisational (service characteristics) and individual (personal and treatment characteristics) variables on readmission patterns
- The relationship between hospital readmissions and the quality of mental health care structures, processes and outcomes in various treatment settings

### 3.c Patterns of readmission after acute psychiatric hospitalisation

In this section of the REPATO calculations of performance indicators from available health care data – only data of discharges and readmissions from acute psychiatry (definition: see glossary at the end of REPATO) – are requested.

Please calculate each indicator using the indicated formula.

#### 3.c.1 Readmission rates after acute psychiatric hospitalisation

Indicators of interest: Proportions of readmissions of individuals with severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) (SMI) after acute psychiatric hospitalisation within 7, 30, 90, respectively 180 days after discharge.

[Period of data analysis: one index year (plus up to 180 days for readmissions)]

Number of acute psychiatric hospitalisations with interval of ≤7 days (A7) / ≤30 days (A30) / ≤90 days (A90) / ≤180 days (A180) from previous acute psychiatric hospital discharge / Number of acute psychiatric hospitalisations (B) × 100				
A7	A30	A90	A180	B
_____	_____	_____	_____	_____
fill in number	fill in number	fill in number	fill in number	fill in number
A7/B × 100	A30/B × 100	A90/B × 100	A180/B × 100	
_____ %	_____ %	_____ %	_____ %	
fill in ratio	fill in ratio	fill in ratio	fill in ratio	
Remarks:				
<b>Data reference</b>	Data refer to readmissions to the same acute psychiatric inpatient facility readmissions to any acute psychiatric inpatient facility			
<b>Period of data collection</b>	_____	Remarks:		
	fill in period			
<b>Study area</b>	whole country your study area sub-area or specific structure		Please describe and specify	
<b>Data source</b>	administrative data (e.g. from insurance company) survey data other data source		Please describe and specify	
<b>Study population</b>	<input type="checkbox"/> all <input type="checkbox"/> sample of acute psychiatric hospitalisations In case of samples: Which proportion is represented?  _____ % (hospitalisations in sample / all hospitalisations × 100)		Please describe and specify	

### 3.c.2 Readmission rates of individuals severe mental illness and/or complex needs (SMI) after acute psychiatric hospitalisation

Indicators of interest: Proportions of readmissions of individuals with severe mental illness and/or complex needs (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) (SMI) after acute psychiatric hospitalisation within 7, 30, 90, respectively 180 days after discharge.

Period of data analysis: one index year (plus up to 180 days for readmissions)

Number of acute psychiatric hospitalisations of individuals with SMI (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) with interval of $\leq 7$ days (A7) / $\leq 30$ days (A30) / $\leq 90$ days (A90) / $\leq 180$ days (A180) from previous acute psychiatric hospital discharge / Number of acute psychiatric hospitalisations of individuals with SMI (B) $\times 100$				
A7	A30	A90	A180	B
_____	_____	_____	_____	_____
fill in number	fill in number	fill in number	fill in number	fill in number
A7/B $\times 100$	A30/B $\times 100$	A90/B $\times 100$	A180/B $\times 100$	
_____	_____	_____ %	_____ %	
fill in ratio	fill in ratio	fill in ratio	fill in ratio	
Remarks:				
<b>Data reference</b>	Data refer to readmissions to the same acute psychiatric inpatient facility readmissions to any acute psychiatric inpatient facility			
<b>Period of data collection</b>	_____	Remarks:		
	fill in period			
<b>Study area</b>	whole country your study area sub-area or specific structure		Please describe and specify	
<b>Data source</b>	administrative data (e.g. from insurance company) survey data other data source		Please describe and specify	
<b>Study population</b>	<input type="checkbox"/> all <input type="checkbox"/> sample of acute psychiatric hospitalisations In case of samples: Which proportion with SMI is represented?  _____ % (hospitalisations with SMI in sample / all hospitalisations with SMI $\times 100$ )		Please describe and specify	

### 3.c.3 Community tenure: All service users and those with severe mental illness and/or complex needs (SMI)

Indicators of interest: Average number of days between discharge from index acute psychiatric hospitalisation and first readmission.

Period of data analysis: one index year (plus up to 365 days for readmissions)

<p><b>Total Number of days between discharge from index acute psychiatric hospitalisation and first acute psychiatric readmission (count 365 days for each service user with no readmission) (A) / Number of acute psychiatric inpatient service users (B)</b></p> <p><b>Total Number of days between discharge from index acute psychiatric hospitalisation and first acute psychiatric readmission (count 365 days for each service user with SMI (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and no readmission) of inpatient service users with SMI (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) (A-SMI) / Number of acute psychiatric inpatient service users with SMI (B-SMI)</b></p>			
A	B	A / B	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
A-SMI	B-SMI	A-SMI / B-SMI	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
Remarks:			
<b>Data reference</b>	Data refer to readmissions to the same acute psychiatric inpatient facility readmissions to any acute psychiatric inpatient facility		
<b>Period of data collection</b>	_____	Remarks:	
	fill in period		
<b>Study area</b>	whole country your study area sub-area or specific structure		Please describe and specify
<b>Data source</b>	administrative data (e.g. from insurance company) survey data other data source		Please describe and specify
<b>Study population</b>	<input type="checkbox"/> all <input type="checkbox"/> sample of acute psychiatric hospitalisations In case of samples: Which proportion with SMI is represented?  _____ % (hospitalisations in sample / all hospitalisations × 100)		Please describe and specify

### 3.c.4 Average number of readmissions after discharge from acute psychiatric hospitalisation: All psychiatric inpatient service users and those with severe mental illness and/or complex needs (SMI)

Indicators of interest: Average number of readmissions within 180 days after discharge from index acute psychiatric hospitalisation .

Period of data analysis: one index year (plus up to 180 days for readmissions)

<p>Total Number of days between discharge from index acute psychiatric hospitalisation and first acute psychiatric readmission (count 365 days for each service user with no readmission) (A) / Number of acute psychiatric inpatient service users (B)</p> <p>Total Number of days between discharge from index acute psychiatric hospitalisation and first acute psychiatric readmission (count 365 days for each service user with SMI (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) and no readmission) of inpatient service users with SMI (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) (A-SMI) / Number of acute psychiatric inpatient service users with SMI (B-SMI)</p>			
A	B	A / B	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
A-SMI	B-SMI	A-SMI / B-SMI	Remarks:
_____	_____	_____	
fill in number	fill in number	fill in number	
Remarks:			
<b>Data reference</b>	Data refer to readmissions to the same acute psychiatric inpatient facility readmissions to any acute psychiatric inpatient facility		
<b>Period of data collection</b>	_____	Remarks:	
	fill in period		
<b>Study area</b>	whole country your study area sub-area or specific structure		Please describe and specify
<b>Data source</b>	administrative data (e.g. from insurance company) survey data other data source		Please describe and specify
<b>Study population</b>	<input type="checkbox"/> all <input type="checkbox"/> sample of acute psychiatric hospitalisations In case of samples: Which proportion is represented?  _____ % (hospitalisations in sample / all hospitalisations × 100)		Please describe and specify

### 3.c.5 Readmissions with outpatient mental health service contacts after index discharge from acute psychiatric hospitalisation: All psychiatric inpatient service users and those with severe mental illness and/or complex needs (SMI)

Indicators of interest: Percentage of individuals with acute psychiatric readmission/s within 180 days after discharge from acute psychiatric index hospitalisation, who also utilised outpatient mental health services.

Period of data analysis: one index year (plus up to 180 days for readmissions and outpatient contacts)

<p>Number of mental health outpatient service contacts within 30 days after discharge from an acute psychiatric hospitalisation with SMI (defined pragmatically for the purpose of REPATO as suffering from schizophrenia or bipolar disorder) (V30) / Number of acute psychiatric hospitalisations with SMI followed by a mental health outpatient service contact within 30 days after discharge (A30)</p> <p>Number of mental health outpatient service contacts within 180 days after discharge from an acute psychiatric hospitalisation with SMI (V180) / Number of acute psychiatric hospitalisations with SMI followed by a mental health outpatient service contact within 180 days after discharge (A180)</p>			
A	B	$A / B \times 100$	Remarks:
_____	_____	_____ %	
fill in number	fill in number	fill in ratio	
A-SMI	B-SMI	$A\text{-SMI} / B\text{-SMI} \times 100$	Remarks:
_____	_____	_____ %	
fill in number	fill in number	fill in ratio	
Remarks:			
<b>Data reference</b>	Data refer to readmissions to the same acute psychiatric inpatient facility readmissions to any acute psychiatric inpatient facility		
<b>Period of data collection</b>	_____	Remarks:	
	fill in period		
<b>Study area</b>	whole country your study area sub-area or specific structure		Please describe and specify
<b>Data source</b>	administrative data (e.g. from insurance company) survey data other data source		Please describe and specify
<b>Study population</b>	<input type="checkbox"/> all <input type="checkbox"/> sample of acute psychiatric hospitalisations In case of samples: Which proportion is represented?  _____ % (hospitalisations in sample / all hospitalisations $\times$ 100)		Please describe and specify (if possible, add also psychiatric inpatient and outpatient service utilisation data):

### 3.d Factors possibly influencing readmissions after acute psychiatric hospitalisation

This section of the REPATO focuses on possible influencing variables on readmissions after a psychiatric hospitalisation, in order to find out, which system and service related factors could predict different readmission patterns.

It can be assumed that a number of variables influence service utilisation patterns of several topics. Where this applies, the respective influencing factors are listed repeatedly, but are described only at a single point.

#### 3.d.1 Involuntary periods during acute psychiatric hospitalisations

Involuntary psychiatric inpatients tend to have a higher readmission risk than patients, who are voluntarily admitted (Kallert et al. 2008). It was also found that multiply readmitted patients are more often admitted compulsorily (König et al. 2003).

<p><b>(A) How high is the percentage of acute psychiatric hospitalisations with at least one period of involuntary status?</b></p> <p><b>(B) How high is the number of acute psychiatric hospitalisations with at least one period of involuntary status per 100,000 adult population?</b></p>		
<p>Number of acute psychiatric hospitalisations with at least one period on involuntary status</p> <p>_____</p> <p>please fill in</p>	<p>Number of acute psychiatric hospitalisations</p> <p>_____</p> <p>please fill in</p>	<p>(A) Number of acute psychiatric hospitalisations with at least one period on involuntary status / Number of acute psychiatric hospitalisations</p> <p>_____ %</p> <p>please fill in</p>
<p>Number of population (age &gt; 18 years)</p> <p>_____</p> <p>please fill in</p>	<p>(B) Number of acute psychiatric hospitalisations with at least one period on involuntary status × 100.000 / Number of population (age &gt; 18 years)</p> <p>_____</p> <p>please fill in</p>	<p>Information source/s:</p> <p><input type="checkbox"/> Service utilisation data</p> <p><input type="checkbox"/> Empirical findings</p> <p><input type="checkbox"/> Expert interview</p> <p>Please specify</p>
<p>Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)</p>		
<p>Remarks and specifications</p>		

### 3.d.2 Bed occupancy at acute psychiatric wards

A demand for inpatient beds can lead to unplanned discharge of patients before arrangements for follow-up have been agreed (Crawford et al. 2004) and therefore raise the risk of rehospitalisation. The total rate of in-patients on psychiatric wards has been shown to correspond to the rate of readmitted patients (Korkeila et al. 1998).

How high do you rate the average annual bed occupancy rate?			
N of annual patient days on acute psychiatric wards (A)  _____ Please fill in	N of beds on acute psychiatric wards (B)  _____ Please fill in	$\frac{A \times 100}{B \times 365}$ _____ % Please fill in	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 3.d.3 Patient turnover on acute psychiatric wards

Evidence shows that a high patient turnover (annual discharges per bed) is significantly associated with an increased risk of readmission within 30 days (Heggstad 2001).

How high do you rate the average annual discharge rate per bed?			
N of annual discharges from acute psychiatric wards (A)  _____ Please fill in	N of beds on acute psychiatric wards (B)  _____ Please fill in	$A / B$ _____ % Please fill in	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 3.d.4 Average length of stay on acute psychiatric wards

As different studies came to different results, no clear association between length of hospital stay and readmission rate in mental health has yet been found (Durbin et al. 2007). A variety of studies detected a clear association between a reduced average length of stay and an increase in readmissions (e.g. Averill et al. 2003, O'Doherty 1998, Wickizer & Lessler 1998, Rosenheck & Massari 1991), respectively between an increased length of stay and lower readmission rates (Lien 2002.). Figueroa et al. (2004) found, that decreasing length of stay below ten days led to an increase in the readmission rate during the 30 days after discharge. While other authors found no evidence that length of stay predicts readmission rates (Espadas 2005, Lieberman et al. 1998), even a positive association between the length of stay and the risk of multiple readmissions was reported (Korkeila et al. 1998).

How high do you rate the average length of stay on acute psychiatric wards?			
N of annual patient days on acute psychiatric wards (A)  <hr/> Please fill in	N of annual discharges from acute psychiatric wards (B)  <hr/> Please fill in	A / B  <hr/> % Please fill in	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 3.d.5 Collaboration with families of service users

Olfson et al. (1999) found out that the absence of a family meeting with inpatient staff during a psychiatric hospital admission is associated with increased readmission rates within 30 days.

Which of the following types of acute psychiatric inpatient facilities is predominant, with regard to the collaboration with families of service users with severe mental illness (share information with families and involve them in treatment)??			
facilities with no regular provider-family collaboration  families receive only general information from providers; specific information (e.g. on diagnosis, medication, scheduled appointments, treatment and discharge plans, etc.) is hardly given and only on demand; contacts are mostly initiated by the families themselves)	<input type="checkbox"/> facilities with some provider-family collaboration  families receive specific information on their relative's mental illness and treatment, at least on demand; providers address families proactively and organise family-staff meetings if required	<input type="checkbox"/> facilities with regular provider-family collaboration  providers regularly engage patients and families in the process of treatment planning and share information with families about their relative's mental illness and treatment; providers address families proactively	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)			
Remarks and specifications			

### 3.d.6 Financing mechanism of acute psychiatric inpatient services

Which are the main financing mechanisms for acute inpatient services at psychiatric wards?	
Please fill in	Information source/s <input type="checkbox"/> Service utilisation data <input type="checkbox"/> Empirical findings <input type="checkbox"/> Expert interview  Please specify
Applies to <input type="checkbox"/> whole country <input type="checkbox"/> your study area <input type="checkbox"/> sub-area or specific structure (please specify)	
Remarks and specifications	

### 3.d.7 Additional variables possibly influencing readmissions after acute psychiatric hospitalisation

<ul style="list-style-type: none"><li>• Existence of community mental health services (see 2.d.4)</li><li>• Outpatient follow-up care (see 2.c.1)</li><li>• Other additional variables</li></ul>
Please list and describe here any additional influencing variables on readmissions after acute psychiatric hospitalisation which you detected.

# Glossary

Primary health care services		
Definitions, examples	Synonyms	DESDE Definition and Code/s
Primary health care services directly provide first-contact services and a coordination function to ensure continuity and ease of movement across the system, so that care remains integrated when more specialised services (e.g. with specialists or in hospitals) are required: E.g. single-handed practice or group practice of one/several general practitioner/s (family doctor/physician), primary health care centre, etc.	General health care services	Facilities which: (a) involve contact between staff and users for some purpose related to management of their condition and its associated clinical and social difficulties (b) are not provided as a part of delivery of residential or day care services (c) have at least some qualified health care professionals as staff members (d) the target population is adult and elderly medical users with no further specification (generic) AE[MG] – (O1.1, O2.1, O3.1, O4.1, O5.1, O6.1, O7.1)

Primary care practice		
Definitions, examples	Synonyms	DESDE Definition and Code/s
Single-handed practice or group practice of one/several general practitioner/s (family doctor/physician).	Family doctor GP practice Medical office	As above

Health centre		
Definitions, examples	Synonyms	DESDE Definition and Code/s
A facility which is used for the provision of primary care services and a range of community health services. It provides a standard of amenity which it is not easy to provide in a traditional consulting room. Services provided include General Medical services and nursing services (and may in addition include AHP services, or primary care services and specialist services).		As above

### Outpatient mental health service

Definitions, examples	Synonyms	DESDE Definition and Code/s
All specialised mental health services, which provide care in an ambulatory and/or mobile setting, e.g. psychiatric outpatient clinic, community mental health team, psychiatrist / psychologist in practice, ...	Ambulatory mental health service Psychiatric outpatient service Psychiatric ambulatory service	Outpatient Care (O), health related: Facilities which: (a) involve contact between staff and users for some purpose related to management of their condition and its associated clinical and social difficulties (b) are not provided as a part of delivery of residential or day care services (c) have at least some qualified health care professionals as staff members (d) the target population is adults (and older people) with mental disorders AE[MD] – (O1.1, O2.1, O3.1, O4.1, O5.1, O6.1, O7.1)

### Psychiatric practice

Definitions, examples	Synonyms	DESDE Definition and Code/s
Single-handed practice or group practice of one/several physician/s with an approval as a specialist in psychiatry.		As above

### Community mental health team / centre

Definitions, examples	Synonyms	DESDE Definition and Code/s
A multiprofessional mental health team offering outpatient and mobile services within a community mental health centre which is located in a neighbourhood catchment area close to the homes of patients; features include offering a series of comprehensive services by one or more team members, provision of continuity of care, linkages to a variety of health and social services, etc.		

## Acute psychiatric hospitalisation

Definitions, examples	Synonyms	DESDE Definition and Code/s
<p>Acute inpatient wards provide care with intensive medical and nursing support for patients in periods of acute psychiatric illness. This excludes the following services: wards for adolescents and wards specifically for older adults, beds allocated for specialist functions, such as eating disorders, learning disabilities, residential psychotherapy for personality disorder, forensic psychiatry, rehabilitation, substance misuse, etc.</p>	<p>Hospital stay</p> <p>inpatient episode at an acute psychiatric ward / department / facility (either at a mental or a general hospital)</p> <p>Acute psychiatric inpatient admission</p>	<p>Residential Care (R), acute, in hospital with 24-hour physician cover: Hospitals which provide beds overnight for users for a purpose related to the clinical and social management of their health condition, where</p> <p>(a) users are admitted because of a crisis, a deterioration of their mental state, behavioural or social functioning which is related to their health condition</p> <p>(b) admissions are usually available within 24 hours</p> <p>(c) users usually retain their own accommodation during the admission</p> <p>(d) there is 24-hour cover by a registered physician</p> <p>(e) regular care (medium to high intensity) of surveillance and/or security for in-patient admission is provided</p> <p>(f) the target population is adults with mental disorders</p> <p>A[MD] – (R1, R2)</p>

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## The REFINEMENT Project

Research on Financing  
Systems' Effect on the Quality  
of Mental Health Care



## REPATO

### Refinement PAthways TOol

An instrument for collecting information on pathways of adults aged 18 or older with mental health needs (excluding dementia and substance disease disorders) through service systems in European countries